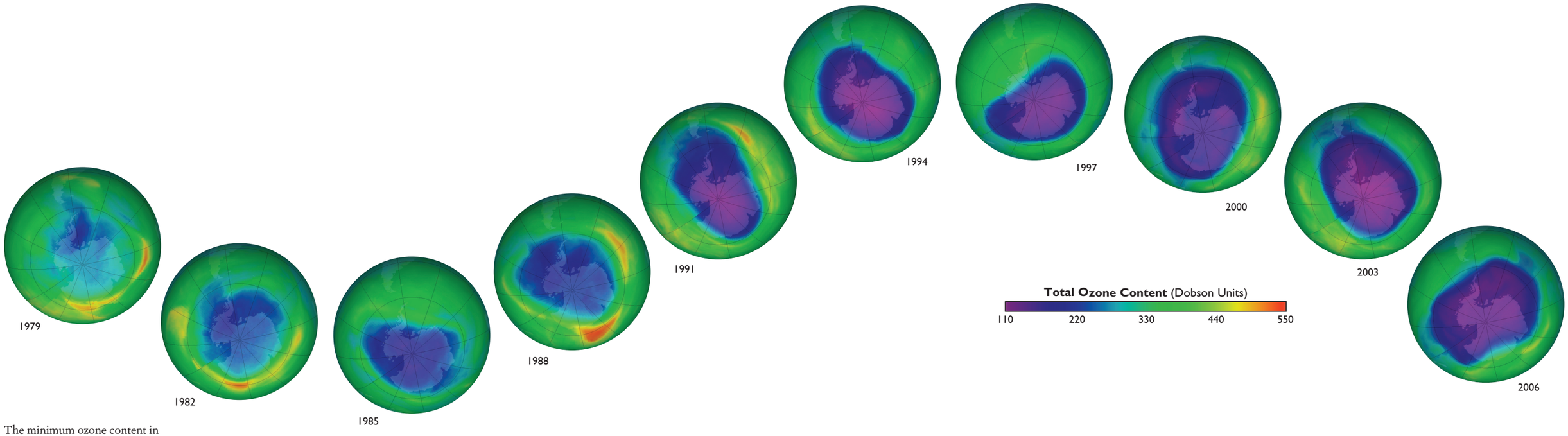
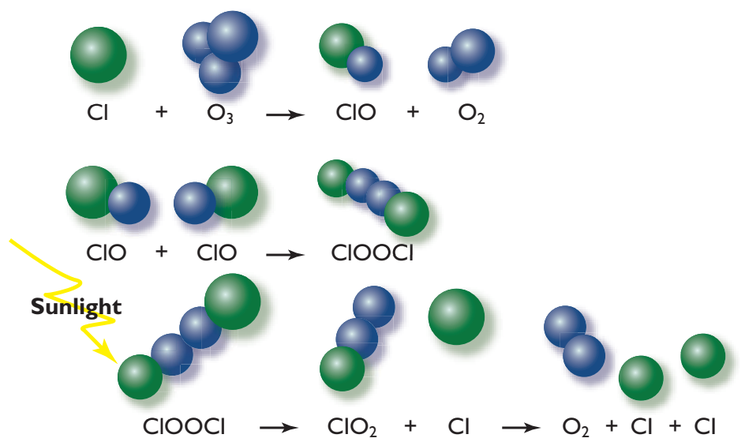
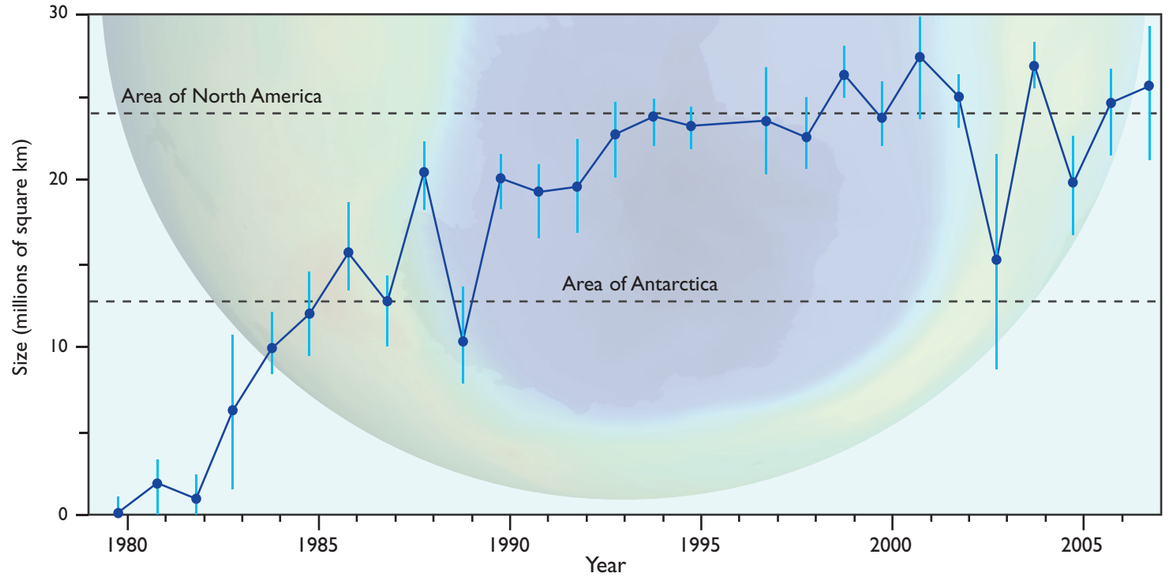


The minimum ozone content in the Southern Hemisphere occurs over Antarctica during September and October. This sequence shows the minimum total ozone content of the Southern Hemisphere for selected years from 1979 to 2006. (Data from the TOMS instrument on the Nimbus 7, Meteor 3, and Earth Probe satellites, and the OMI instrument on Aura.)



In the ozone hole, reactions on the surface of ice crystals create large concentrations of chlorine monoxide (ClO). ClO participates in a multi-step set of catalytic reactions that convert ozone into oxygen.



Average area of the Antarctic ozone hole as a function of time, from 1980 to 2006, as compared to the area of North America and Antarctica. Vertical bars indicate maximum and minimum single day areas.